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The Educational SCREEN

March, 1930

In This Issue

The Function of the Picture in Science Instruction

Visual Education in Europe (IV) Jena, Nuremberg, Vienna, Budapest, Berne, Zurich

A critical survey of visual instruction activities in leading European centers and institutions.

Minimum Standard Equipment for Visual Education

"The Film Estimates"

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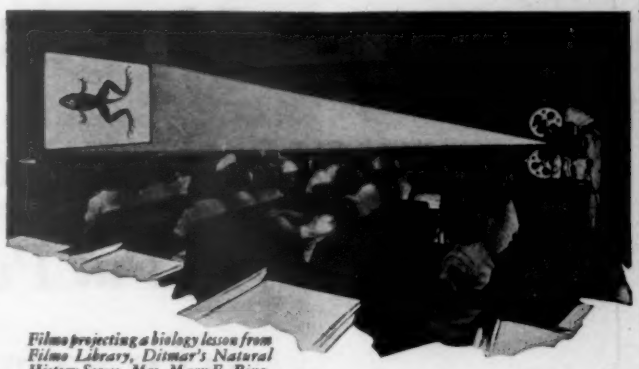

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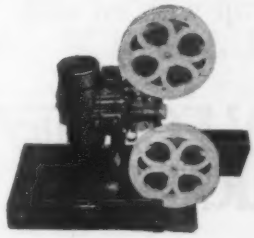

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VOLUME IX NUMBER 3

THE EDUCATIONAL SCREEN

The Only Magazine Devoted to The New Influence in National Education

MARCH, 1930

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Visual Education in Europe (IV)

Jena, Nuremberg, Vienna, Budapest, Berne, Zurich

W. M. Gregory

Director Educational Museum, Cleveland Public Schools

The P'anetarium at Jena

THE famous Carl Zeiss optical company is located within the shadows of old Jena, the former center of German intellectual life. This company has developed the Zeiss Planetarium which visualizes the marvels of the solar system. The Planetarium is a large dome beneath which are comfortable seats for 800 people. The lights are dimmed and the starry heavens are perfectly projected on the inside of the dome. This spectacular exhibition of 54,000 stars with the familiar constellations in place, always causes exclamations of wonderment. The stars are not only in place, but they have the correct movements. The sun, planets and moon can be added to this motion picture of the heavens, which demonstrates many astronomic movements. The changes of the seasons are done in minutes rather than months. The mysteries of the universe are laid bare without regard to time or weather. The instrument for visualizing the heavens is a dumb-bell shaped projection lantern which is beneath the center of the dome. The southern and northern heavens are represented by the respective ends of the lantern. The movements of the sun, planets, moon and stars are controlled by the speaker.

This "canned" astronomy is very popular and more than fifteen German cities have their Planetaria. This country has three Planetaria now under construction in New York, Chicago, and Philadelphia. In the Planetarium the facts of astronomy have replaced the mythical stories of the Greek or the fancies of astrology.

Old Nuremberg

Nuremberg is one of the old imperial cities of the middle ages which has a five-sided turreted castle on a hill, enclosed by a high wall and a broad dry moat. The narrow streets of the town within the old walls are lined with Gothic frame houses of the fifteenth century, which were built of wood beams embedded in plaster. The overhanging wooden galleries and oriel windows are marked features of the old houses which were the homes of Albrecht Durer, Martin Behaim and Hans Sachs. The many street statues and church decorations indicate that the stone masons furnished the sculptures.

The medieval architecture is well preserved and the present building regulations require all reconstructions to be of the old type within the city walls. Its 500,000 inhabitants are prosperous in the modern industries of machinery, metal ware, toys, lead pencils, and gingerbread, the famous Lebkuchen.

The Germanic Museum is an extensive collection of the history of German art and civilization. Its collections of ecclesiastical figures from famous cathedrals of early Germany, indicate how important the early church considered the visualizing of sacred figures in statuary and wood carvings. The museum has excellent collections of medieval fire-arms, hunting-weapons, models of weights and measures, vehicles and jousting equipment. The collection of rustic utensils, furniture and 365 costumed peasants is a vivid witness of the style *mores*. The display of scientific instruments is supposed to include the Martin Behaim's globe (1491) which was not in place. This globe which was made in Nuremberg was studied by Christopher Columbus before starting his voyage to the New World. Christof Muller of Nuremberg has negatives for nearly all of the material in the Germanic Museum and he will supply photographs. This is an excellent source for photographs of Nuremberg, old buildings, castles, wall and moat. The following numbers which relate to Martin Behaim might prove of interest: Cavi 3369; 3871; and 3876. The Germanic Museum is a treasure house for materials relating to German civilization. A. Wahrischraffe issues an excellent catalogue of the famous Nuremberg's toys.

Vienna Technical Museum for Science and Industry

The Technical Museum building has about 16,000 square feet in the three-storied edifice, which is located in a large park. The halls and galleries of this building are arranged to make possible comprehensive exhibits which illustrate the evolutions which have taken place within many fields where science is applied to industry. The electricity used in the building would serve a small town of 10,000 people. The building was provided by the city of Vienna, and the exhibits are supplied by technical organizations and industries.

The large central machine hall illustrates transportation from the slave to the modern utilization of wind, heat and water power. Each model is actual size and can be operated by electricity. Cut sections show clearly the interior

working of all machinery. Special attention has been given to the explanations of each machine, so as to bring out the essential features. Colored drawings, descriptions and legends are concise, attractive and distinctly visible.

Under these conditions even the layman is interested. A full size Bessemer converter is cross-sectioned; models of the first rolling mills and some of the great Krupp hammers of the modern times are shown. Some of the most striking exhibits are *Steinbierbrauerei, Turkische Turbinemuhle, Alte Papiermuhle, Lavoisier Laboratorium, Alte Kaffeekuche, Alchemistisches Laboratorium, Lilienthal-Gleitflieger* and *Model Feuermaschine*. Excellent photographs of nearly all exhibits may be obtained on application to the director.

Everywhere in this museum one is impressed with this story of social advancement due to the improvement of machinery to replace manual labor. The reconstructions of the ancient workshop, the old mill, and the historic laboratories serve as an introduction to the displays of each of the technical departments and the modern development in different fields. Physics and chemistry are systematically illustrated by many experiments which visitors may try out. Austrian inventors are given much prominence as Welsbach, Mitterhofer, Von Reis, Ressel and others.

This technical museum is by no means a graveyard of antiquated machinery. Austria visualizes its scientific progress to its youth through these interesting displays. Too much can not be said for an institution which gives inspiration to its youth in those things that vitally concern the life of all the people.

The museum is at present limited in its services due to the war, but crowds are always present when the opportunity offers.

Lantern Slide Bureau of Vienna

The Lantern Slide Bureau of Austria is located in Vienna at 3 Sensendasse. The director is Dr. Alphons Lhotsky. The collection consists of 50,000 well chosen subjects which are fully classified and indexed. About 100,000 slides were circulated in Austria during 1928. The slides are of high photographic quality and are well adapted to educational purposes in schools and colleges. The larger part of the collection is historical. The use of the lantern slides seems to be more on the lecture plan in Austrian schools than as a regular class exercise. Dr. Lhotsky realizes the value of the classroom use of the slide and is adapting it to modern needs. Dr. Lhotsky welcomes inquiries from America and would be interested in exchange of materials as well as ideas of organization and use of all types of visual materials.

The Art Museum, Vienna

The Historical Art Museum of Vienna is rich in magnificent paintings, sculptures, tapestries, ivories, etc. A few of the many great masterpieces are Raphael's *Madonna al Verde,* many Titians, e. g. *Gypsy Madonna, Virgin with Cherries* and *Ecce Homo,* Giorgione's *Three Philosophers,* Velazquez' *Infant Balthasar Carlos,* Rubens' *The Pelisse,* Rembrandt's *Self-Portrait,* etc. Reproductions of any of these famous masterpieces in Viennese galleries can be secured from Kunstderlag Wolfrum at Kohlmarket 4 Vienna. The armory collection of this museum is one of the finest in the world, and many interesting photographs can be secured showing the development and its significance in the medieval times. Excellent catalogues are available for selecting photographs of handicraft, planetaria, horoscopes, mathematical instruments, sundials, astronomical clocks, travelers' watches, all of about the year 1500. This is material for teaching medieval history.

Natural History Museum, Vienna

The Zoological collections which are formal are displayed in dingy cases. The wonderful collection of meteorites is poorly displayed. The collection of fishes is one of the largest in the world and most complete.

The extinct animals are well represented by the diplodocus from Wyoming, the great auk, the famous dodo, the white rhinoceros and others. Many groups have the mounted animals and the skeletons arranged side by side for comparative study. The displays are entirely systematic and to the layman are as interesting as a stuffed circus. A wide use of interesting labels, habitat settings, maps and other educational aids would make the collections of greater value. However, one marvels at the present fine condition of all the museum collections in Vienna considering the aftermath of the war.

The Urania of Vienna

This is a building which combines an observatory, concert hall, lecture rooms, and a motion picture auditorium. It is situated on the banks of the Danube Canal in a very conspicuous place and is widely used for lectures, free motion pictures, concerts and as an observatory.

A. Pichler's Widow and Sons, Vienna

This interesting organization supplies visual material to all branches of education in Austria. The apparatus is cleverly designed but most of it is of Junior high school grade. This organization has been especially active in organizing charts which are largely from Germany.

Budapest

At Budapest the East and West rub elbows in the shops, markets and streets. The influence of the Magyar is reflected in the brilliant

(*Concluded on page* 90)

Minimum Standard Equipment for Visual Education (II)

JAMES G. SIGMAN
Director Visual Education, Philadelphia Schools

(Concluded from February issue)

FIRST, proper projection apparatus should be carefully considered. For the elementary school the possession of at least one lantern from Dr. Hoban's standard list is imperative. It should be of a type that is adaptable for both glass slides and stillfilm or filmslide attachments, and should be sufficiently brilliant and powerful for so-called "daylight" projection upon necessity. Dr. Hoban suggests one lantern for schools of less than eight rooms, and more lanterns for larger elementary schools. It might be added that this second lantern might wisely be chosen from the opaque-projector combination type, opening a new field of valuable projection for all grades, with the so-called "daylight" screen to accompany this second lantern. This combination lantern will cover practically all the needs of the school in glass and film slide, and also in pictorial materials. The cost of the first lantern above mentioned (with Stillfilm attachment) would be about $65.00, and the second or combination opaque and slide projector with filmslide attachment should not exceed $135.00.

For the larger elementary schools Dr. Hoban has added to the projection equipment a portable motion picture projector (16mm.) with suggested lists of the best offerings; for higher schools "efficient projectors for teaching needs". These classroom projectors have passed the experimental stage of development, and their value has been clearly demonstrated by nation-wide tests of instructional results. Their use in boys' camps and Y. M. C. A. work preceded their school adoption, but now that the enlargement of the libraries of educational film has made these 16 mm. projectors very valuable to schools and colleges, their rapid introduction as standard equipment will surely follow. The price range for the better class-room projectors is from $180 to $205 list, with a fair introductory discount for schools, especially when secured on competitive bids. A large elementary school may therefore be supplied with at least three standard projectors for less than a total cost of $350, as follows:

1. Standard stereopticon lantern with Still film attachment—$65
2. Second lantern (opaque and glass slide) with filmslide attachment—$135
3. Standard 16 mm. classroom motion picture projector—about $150

In the equipment of Junior and Senior High Schools it is wise to add the standard (35mm.) motion picture equipment for auditorium showings to the required list. These are now being supplied in the semi-portable form for less than $500, well-adapted for use in the ordinary high school assembly hall. The use of standard (35mm.) machines opens a wide choice of industrial and theatrical film, which in the past has not been made in the narrow width. For the larger senior high schools of from two to four thousand students, the Simplex or some other booth machine of theatrical type is required, in order to make a brilliant and successful throw across their galleried auditoriums. It is understood that the new Olney High School of Philadelphia, which will be the largest in the city and one of the most modern in the United States, is to be equipped with the Simplex, wired for sound effects, in case the energetic Fathers Association of that community cares to make this addition at a later date. In general, the high cost of sound equipment and the meagre educational offerings in this type of film will probably postpone any such ambitious expansion in the schools for some time to come, except in the medical and other college departments where the lecture system obtains. In the elementary and secondary schools the teacher will still remain as the best "talkie" yet devised. The cost of standard motion picture equipment for high schools ranges from $1,000 to $1,500, exclusive of booth, and about $3,000 for sound equipment on a long-term lease basis.

The foregoing paragraphs on projection equipment for Junior and Senior High Schools have made no mention of purely scientific apparatus, such as microscopes and micro-opticons, neither have they outlined the needs of the schools in regard to maps, charts, and globes for use in geography, history, health, music, or other special subjects. These are all very important, but belong to departmental rather than to visual budgets for universal use. Probably the time will come when these departments will ask for still and motion projectors of

types distinctly suitable to their specific needs, especially in the large school units. Already many of the science and art departments are supplied in the high schools of Philadelphia with opaque projectors in combination with glass and film slide attachments, because of the rich array of pictorial material available in those departments. But this custom of course cannot always prevail in the smaller schools of the city and state, hence our concern is for minimum requirements in this discussion, rather than maximum.

Assuming that every graded school, however small, has been equipped with at least one lantern and one motion picture classroom projector, at a cost of slightly more than $200, the second problem for the local administrative authority to solve is the proper darkening of the room or rooms to be used. Two observations are almost axiomatic in this matter; first, that darker rooms always mean sharper delineation of pictures and less strain on the pupils' eyes; second, that motion pictures and presentation of opaque materials require more darkness as a general rule than lantern slide projection, due to the loss of brilliancy because of intermittent shutter-action or of mirror-reflection. The invention of the translucent type of screen has made the problem of room darkening somewhat less troublesome, but its high cost, its distortion of pictures at an angle of vision, its small size for auditorium pictures, and its fragile composition have prevented its widespread introduction in schools.

While its many good points have been somewhat obscured by these drawbacks, the translucent screen has gained considerable popularity for opaque projection, and it has also been used in many of the recent classroom motion picture tests. It has the double value of aiding classroom discipline during visual lessons, since total darkness is sometimes an excellent opportunity for mischief-makers, and at the same time making note-taking and other forms of immediate class instruction possible at all times during the projection period. But most of the school systems still rely upon the common dark shades for stereopticon work. These are quite expensive when installed over a large school building, and many schools are forced to equip only one or two rooms on a floor or to a department. In many Philadelphia schools visual education is carried on very successfully in a special visual room, fitted with black shades and movable chairs, sufficient for the use of two parallel sections and their teachers at one time. Where all the rooms cannot be equipped for lantern use, this method has proved to be very satisfactory.

The ideal equipment of course calls for the placement of the lantern directly in the classroom, to be used just at the time and place in the lesson or course where visual education will be applicable, without the delay and holiday spirit inspired by moving to another room or the auditorium. Therefore the regular classroom is the best place for the use of visual aids, and some degree of darkening should be made possible at its original furnishing, either in the form of shades or draperies. The former method is preferable from the standpoints of convenience and good housekeeping, but care should be taken that the black shades are properly hung and oversize if possible. If they are fitted to the window frame itself, they may be prevented from sagging or gaping by being run in grooved stripping, or by reinforcement on each side by a narrow wooden shutter which may be hinged to clamp down over the edge of the shade. Draperies are superior for auditorium darkening, and classrooms may similarly be darkened by cheap draw curtains of dark material attached by the usual curtain rings to a wire across the entire wall.

Returning to our original minimum equipment of one standard modern lantern (with Stillfilm attachment) for the small school, wherever no opaque projection is undertaken and no motion pictures are available, it is quite possible to project glass slides and stillfilm in a room slightly darkened by the customary green window shades only. These modern lanterns are equipped with a very powerful 500-watt lamp, which makes a clear picture under electric light or daylight competition, although the latter is a more deadly foe than the former. But even these so-called "daylight" lanterns or the so-called "daylight screens" are always improved in service to classes and in saving from eye-strain by reduction of such competition with light. For motion pictures there should always be darkness. We have all witnessed the instant loss of clear visibility which accompanies the sudden opening of a door in a motion picture theatre, especially when adjacent to the screen. The picture seemed momentarily to be wiped out before us. With the increasing use of 16 mm. projectors in the schools of our state as minimum standard equipment, our Boards of Education should not fail to provide black shades for our classrooms, or as an alternative, a properly-fitted visual room in each school.

Standard equipment in screens is indicated by the improvement in projection equipment. Wherever a classroom has its own black shades, it follows as a matter of course that

it should have its own screen, always ready for use at the proper time and place in the lesson plan. Improvised screens may be made by painting a six-foot square on the classroom wall; by using the reverse side of a map; by stretching a square of canvas or sheeting across the front of the room; or even by employing the blackboard or plaster wall surface for a reflecting screen. Pittsburgh buys gallons of aluminum paint each year in carrying out the first of these original methods, although many schools find that the height of the blackboards in classrooms prevents the painting of this six-foot square on the classroom wall at a proper point for the pupils' eyes. The other methods are more or less makeshift in character, and should be avoided by the installation of good screens in original equipment.

New York State has solved the screen problem in class-rooms by the adoption of a standard roller canvas screen, six feet by six, and after much experimentation with beaded and metallic-surfaced screens of all sizes, the writer is almost convinced of the wisdom and permanency of this type of screen equipment. Philadelphia now carries two standard screens on its "buildings equipment standard list." One is the large silver-surfaced so-called "Superlite" screen, for high school auditoriums. It is built upon a rigid wooden frame, located permanently on the rear wall of the stage, where it may be pushed upward out of harm's way along two grooves in the two upright posts. Over this frame the metallic-surfaced screen is stretched and attached to drumlike tightness. It comes in sizes of twelve by fifteen and also fifteen by eighteen feet, depending upon the size of the stage and the auditorium. This type of screen has been far more serviceable than the old spring-roller canvas kind, which tends to become unwieldy and to crease badly in large sizes.

The smaller auditoriums, and classrooms which are thrown together for assembly purposes, are still equipped, however, with the spring roller screen in the nine-by-twelve foot size. This size is just about the limit of efficiency in the roller type. Its reflection is good from all angles, and its cost is very reasonable. With the introduction of classroom projectors the need developed for more brilliant reflection, and for smaller screens to be used in one classroom only. With but one such machine furnished to any school, it might be wise to secure a higher grade portable screen which could be taken with the projector from room to room. These may now be secured in the metal map-case variety; which may be attached and detached quickly when two hooks are properly spaced at the top of the blackboard in each room. A second portable screen is boxed in a long case, from which the screen is raised to its complete height, braced by metal or wooden supports on the sides or rear. A third type is mounted on a plain backbone to which its spring roller is attached, and this is the least expensive of all.

It is evident that the standard classroom screen for 16 mm. pictures has not yet been evolved, since the portable box-type that pleases the lecturer or demonstrator does not appeal to teachers, and the map-case variety is not immune from the ills that spring rollers are heir to, without the easy accessibility for repair possessed by the ordinary window-shade. Our Department of Supplies and the Division of Visual Education are just about decided upon a three-fold screen program for Philadelphia, which will include the large rigid Superlite screens, costing from $200 to $300, for high school auditoriums; the nine-by-twelve white canvas roller screen, costing about $25, for small auditoriums and combined class-rooms; and the adoption of a six-by-six, metallic - surfaced, spring - roller screen mounted on a plain blackboard, for classroom use, at a quotation of about $10 each.

The fourth requirement mentioned for classroom projection was a metal stand for the lantern or projector. These are now being made a part of the standard lantern equipment for all Philadelphia schools, and offer several distinct advantages over the old custom of projecting from a pupil's desk. They are adjustable for height, and may be disassembled easily for storage or moving. A metal shelf underneath is convenient for boxes of slides or reels of film, and the narrowness of the table allows it to be placed in classroom aisles anywhere, while its solidity and strength will support any lantern or projector without vibration. These metal projection tables are a good investment at a price ranging from $15 to $25. Two other types are also on the market, both with tripod support, one being more expensive and the other less expensive than the four-footed metal table just described. The cheaper one is too easily toppled over for classroom comfort, however, while the expensive variety is like the highly-priced beaded screens; too costly for universal use in the pressure of other needs.

Storage facilities have been mentioned a fifth standard essential for good visual equipment. Each school of smaller size, and each department in a large high school, should have ample storage space for the visual materials which may be supplied. This should include cabinet or closet storage for glass slides, frequently furnished with unit sets by the company selling the slides,

metal cabinets for storage of films, even though it may be only the common metal locker with pairs of cross-rods spaced five or six inches apart for rows of reels placed on edge; and a good metal or wooden filing-case of the 11" by 14" type for the storage of pictorial material for opaque projection. Safety, as well as economy and convenience, demands all these measures. Larger cases, fitted with glass doors for display purposes and ready consultation, should be constructed in every school for a small school museum, as recommended by Dr. Hoban in his object-specimen model summary. This may be located in the school library, office, study hall, visual room, or even in the main corridor, as a permanent acquisition.

In conclusion, as a sixth essential of standard equipment, and in many ways most important of all, must be listed the accumulation of a proper library of visual materials to be housed in these cabinets and cases. Opinion is still divided between the two schools of thought that claim, on the one hand, that every school should own its own library of slides, films, and other sensory and visual aids, and on the other hand, that any school will be better served by a central circulating library of greater variety and richness.. In the Newark and Pittsburgh schools, a happy solution is reached whereby each school has its own slide collection in the form of unit sets of song, map, history, geography, and primary reading slides, and a school appropriation of from $50 to $259 annually per school for enlargement of the same. At the same time a central slide library supplements this local library upon request with loans of circulating sets. In Philadelphia, over fifty sets of stereographs and stereoscopes are now established as permanent equipment in schools, but only a few have sets of slides, largely by gift. The library of glass slides is practically all concentrated in the offices of the Division of Visual Education, from which they are distributed by truck to the various schools of the city on order weekly. This system of course requires the possession of many duplicate sets of slides, since all schools reach a given topic in the geography or history course within approximately the same period of time. This condition leads at times to delay and dissatisfaction, but in general our principals seem pleased with the promptness and completeness of our lantern slide service. We believe that the delivery of these requested slides to a school, ready for instant use, imposes a moral obligation to use them at the right time and place in the course of study. On the other hand the human failings of laziness and forgetfulness will frequently allow the permanent school slide set to remain untouched in the principal's office, or in the storage closet, because of the trouble involved in the proper selection and preparation of visual materials.

For these reasons it also seems best not to make film libraries standard equipment for individual schools, although in compliance with the rules of the Fire Marshal in Philadelphia, film cabinets are placed in each motion picture booth. Film requires constant care and repair, and may best be cared for and repaired in some central agency. The formation of a film library of 16 mm. or 35 mm. film is also a staggering proposition financially to any school system of any size, because of the cost per school when such library is duplicated in each school owning a projector. Practically all city systems are agreed upon the wisdom of a central film library, although they may differ upon the policy to be pursued in the case of slide sets. Filmslides and Stillfilm are so much lower in cost, that they may be accumulated by separate schools without serious outlay, and the same is true of prints and pictorial material in general.

The advent of the 16mm. or classroom motion picture projector, with its lower-priced reels of strictly educational film, has changed the attitude of the authorities toward the safety and economy of storage and usage of films by one school as standard equipment. Where the

Visual Instruction Headquarters in the Philadelphia Schools

city is one of considerable size, district or central office circulation is favored, but in the smaller towns, the high school would be the logical place for such central storage. Where there is no visual supervision, an exchange system of reels between schools, or even between districts, will operate to cut down the high cost of purchasing motion pictures outright. The rental system, like house-rental, leaves the school district with no permanent visual property in the end, although New York City still adheres to this method exclusively. The use of free films from industrial or commercial sources is still fairly universal, but it involves questions of advertising and propaganda which color the tone of the films offered, and lower them below the standard of strictly instructional reels.

The formation of circulating film and slide libraries throughout the western states, at the great state universities and museums, is a hopeful sign of the times. New Jersey has already made a beginning of a 16 mm. film library at the Trenton Museum, and the Commercial Museum of Philadelphia has circulated slidesets and standard film for many years throughout the state of Pennsylvania. This is the only way in which rural and small town units may ever acquire a great variety of film offerings for the use of their schools, and the state owes it to the communities to inaugurate and organize such a central film library at once. Cities of larger size may of course form their own circulating libraries in proportion to their financial strength if they care to do so, but neither should be compelled to rely upon advertising and non-educational sources for proper visual equipment. Local museums should not be expected to replace the city or state responsibility in this matter without subsidy or compensation of some sort. The School District of Philadelphia has long recognized this obligation, and now maintains three museum teachers and a clerk constantly at the Commercial Museum, where over one hundred thousand public school children attended lectures and lessons last year, under direction of the efficient Curator, Mr. Charles Toothaker. This same public-spirited institution has also placed hundreds of specimen cabinets in the schools of its own city and the state, which should be made standard equipment in every school with the museum compensated more adequately for their installation.

In closing may I undertake to envision for this group of educators what I should be happy to see installed as visual equipment in every school unit, even the smallest graded school, in the Commonwealth of Pennsylvania. Picture a room fitted for rapid transformation to projection uses, whether classroom, auditorium, or recreation room, even in the basement, if necessary. Already equipped with electrical outlets, preferably baseboard receptacles, by wise foresight, it possesses the necessary black shades or draperies for quick darkening as the pupils are seated and called to attention. The screen is adjusted in a moment's time, and the metal lantern table pushed into place. The reel of educational film or the set of slides is prefaced by the proper approach, and then follows a fifteen-minute period of pictures, with the minimum of oral explanation. This is followed by an equal period of rapid review and clinching of subject-matter, which has just been presented in a vivid, never-to-be-forgotten manner. What is needed to bring such properly balanced oral and visual instruction as an everyday diet for every school unit in Pennsylvania?

The answer is this—a minimum investment of a few hundred dollars, wisely used for standard materials, approximately as follows:

1) A *standard lantern, with Still-film or filmslide* attachment (with a second lantern if possible for opaque projection)
2) A *16 mm. classroom projector* for educational safety film only (reels to be supplied by a great state library on request)
3) A *specimen cabinet* of object-specimen-model materials (perhaps made up by the Commercial Museum-supplemented locally)
4) A *storage cabinet for prints and pictorial* material (if there is no opaque projector-stereographs and scopes, at least)
5) A *small unit collection* of everyday slides-classified for use (supplemented by State and Museum circulation)
6) A proper attention to *accessories*—screen, lantern stand, dark shades, outlets at proper end of room, folding chairs, and the like
7) A *principal and teachers* trained and interested in visual aids and their use, not for entertainment, but for instructional value.

In the nearby Junior or Senior High Schools this work of concrete education goes forward, with somewhat more advanced and more expensive equipment to supplement the above: more lanterns as needed, a standard motion picture machine as well as the 16 mm. projector; opaque projectors for Art and Science; abundant chart, map, globe and pictorial material.

Boards of Education, you will receive rich dividends from these very modest investments in visual education!

The Function of the Picture in Science Instruction

AARON HORN

SCIENCE courses have for a good many years been constructed along objective lines. Laboratory work, experiments, and demonstrations have been the focal points around which city and state syllabi have been built and these frequently prescribe minimum requirements in these activities.

Recent years, especially in connection with the introduction of the general science course, have seen a number of changes in the traditional methods of science instruction. One very important change is the increased use of the slide and film. It may be that this recognition of the projected picture is merely a result of the increased availability of slides and films, that this particular form of visual education is taking its place along with the other objective methods of science instruction without involving any serious change in attitude. Or, it may be that the new emphasis upon the picture is a reflection of changing purposes in this field, of changing contents and of changing methods.

Let us examine the use of pictures in its relation to the classroom experiment and demonstration, recognized as "the very foundation of the teaching unit" in science study.

An important class of demonstration given in the science course is that whose purpose is to derive scientific laws or generalizations. These demonstrations constitute experiments. The process of planning and executing such experiments is reputed to provide the pupil with training in scientific method. The generalizations derived from them furnish the organization to the pupil's knowledge concerning natural phenomena, give unification to his concepts, and form a basis for the extension of his knowledge with relative ease. The experiments are done by the use of standardized laboratory equipment or by specially designed apparatus for the laboratory illustration of certain principles.

Often, an experiment may involve the use of apparatus that is too expensive or dangerous for the classroom, or, for other reasons, such as lack of visibility or technical skill involved in execution, cannot be performed in the classroom. Here the moving picture comes in to assist the traditional methods of science instruction. A film showing the experiment is a more or less adequate substitute for the real thing. It lacks, however, the element of personal planning and participation and is not as well suited to training in scientific method as is actual experimentation. This use of the film involves no change in the aims of science teaching; it is a continuation of and an addition to previous methods. With the experiment as the basis of the teaching unit, the purpose of which is to help organize the science knowledge of the pupil in a systematized study, the film or slide may assume the function of an aid in the duplication of the experimental conditions. What it offers to the pupil as such is not different in kind from what he derives from the classroom experiment.

The function of the science course as today conceived is not, however, merely to furnish the framework of generalizations which make up theoretical science but to provide for an organized study of *environment*. It is interested in the phenomena of nature which are of human significance, in their control and their application to the service of human needs. It desires, also, that the knowledge and understanding of these phenomena be logically organized, and such organization can indeed be effected around experimentally derived principles. But the basis of such organization is knowledge, experience; and the purpose of such organization is to encourage the proper assimilation of further experience. It is here that the classroom experiment aided perhaps by the duplicative moving picture, falls down. It does not provide the pupil with environmental experience. While it employs concrete, even breakable materials, it is thoroughly abstract in meaning. While it demonstrates, it does not represent the forces that are working in the environment for human harm or welfare.

It is here that the picture enters to take a position different from and of more fundamental importance in the lesson than that of the experiment. It is from the introduction of the word "environment" into the definition of the science course, it is from the change of such a traditional topic as "gases" to "air as related to life", it is from the frequent organization of science knowledge around such topics as "Transportation" and "Communication" that the increased use of the projected picture originates.

Under such a redefinition of the science course, the plan of the individual lesson and the organization of the course from the elementary through the high school grades must be based on the psychological sequence (1) environmental experience, (2) experimental derivation of physical law, (3) application of these laws to previous and

(*Concluded on page* 80)

NEWS AND NOTES

CONDUCTED BY THE STAFF

Record Exports of American Films for 1929

The large increase in exports of American motion pictures for 1929 is attributed to the popularity of sound and dialogue films throughout the world coupled with the increased number of silent motion pictures sent abroad to supply those houses in foreign markets not yet equipped to show sound films. The Motion Picture Division of the Bureau of Foreign and Domestic Commerce at Washington reports the preliminary figures of motion picture exports for 1929 to be 282,215,480 feet of films at a declared value of $7,622,316 as against 222,122,586 feet valued at $6,473,990 during 1928. It is in our positive exports that the big increase for 1929 wil be found; 273,772,283 feet with a value of $6,501,714 were exported during this period as against 214,410,785 feet valued at $5,253,094 for the year 1928.

A second factor, according to the Division, which dominated American foreign trade in motion pictures during the past year is the continuation of repressive legislation in the leading countries of Europe and the spread of such legislation to Australia and New Zealand, the two markets in the Far East which supply the bulk of motion picture revenues from that region. The first factor, that of sound pictures, very well counter-balances the second.

Early in 1929, American "talkies" were beginning to make their appearance on the screens of the few foreign theaters which had been wired. This new medium of entertainment, especially in English speaking countries was so immediately successful, that the wiring of motion picture houses abroad broke all records. The result is that American revenues from such countries as the United Kingdom, Australia and New Zealand showed an increase far exceeding that of the year 1928. This increase materially outweighs any losses from certain continental European countries where legislative difficulties and other factors curtailed somewhat the distribution of films from the United States.

The wiring of theaters in foreign countries is going along at such a rapid pace that any figures on the subject become out of date almost as soon as published. However, researches made by this Division indicate that as of December 31, 1929, outside of the United States and Canada, approximately 2,200 theaters were wired with some sort of a sound device. Of these about 1,500 are in Europe, 400 are in the Far East, 250 in Latin America and the remaining 50 in other parts of the world.

Touching on legislation, there is no reason to believe that greater difficulties will be presented in 1930 than in 1929. The determined stand of American distributors and the French Exhibitor against a tightening up of the French quota was the outstanding legislative problem in the European market during 1929. During the progress of settling the terms of the quota legislation no new contracts for distribution of American films in France were made for a period of over six months and the temporary settlement on the basis of the status quo placed a decided check on the spread of such legislation in other countries which considered the adoption of quota laws provided France was successful in carrying through her new quota demands.

Hungary during 1929 enacted more stringent quota rules, Czechoslovakia and Spain made gestures in that direction, and Italy has prohibited foreign dialogue in talking pictures and even decreed that songs in a foreign tongue be banned. The latter ban however was recently removed. Regulations based on those in effect in the United Kingdom were put in force in Australia and New Zealand. Germany finally the originator of the quota system will continue to operate till July, 1930 on a system of import restrictions on films, under a law which went into effect on January 1, 1929. Germany, however, must either abolish its regulations or enact new ones before July 1, 1930. Late reports indicate that the existing regulations will be carried through for the 1930-31 season. Patent litigation on sound systems in Germany which has greatly curtailed the distribution of American pictures will have considerable bearing on the type of quota promulgated in the German market.

Systematic Use of Radio In School Work

A Chicago newspaper, *The Chicago Daily News*, through its own broadcasting station *WMAQ*, has developed a systematic radio service for schools. After several years of serious and conservative experimentation, this service has now reached a point where it commands and deserves the serious attention of all school Principals and Superintendents within effective range of station *WMAQ*.

The programs offered for the present school year correlate with the standard school curriculum at many points. The subject-matter of the broadcasts already includes Music, Geography, Science, Art, Literature, Social Science, American History, and foreign language work. The time-schedule for the various subjects is planned to fit the school-day and the school-week as perfectly as possible. Complete details of schedule and subject-matter, together with supplementary reading matter for the teacher's use, are supplied to users of the service far in advance. All schools equipped with radio sets can thus make schedule-arrange-

ments and give proper preparation to their classes so as to get maximum values out of the radio periods.

Most of the broadcasts are verbal only and are limited to auditory appeal. But in one subject—Geography—visualization by pictures accomplishes the auditory appeal by an ingenious and simple method.

The Geography subjects come at 9:10 and 9:55 A. M. on Tuesdays and last 20 minutes each, one being for elementary grades and one for Junior High School. They are given by Roy J. Snell, the well known lecturer and prolific writer of travel books for boys and girls. Mr. Snell has selected significant slides from the Keystone 600-Set—which is owned by so many schools—arranged them in the order in which the pictures will be discussed in his talk, and the list of these slides by number is given in the schedule sent to schools in advance. The teacher in charge of the Geography work merely picks out these slides, sets the stereopticon before the screen, and projects the slides as directed by Mr. Snell's voice over the air.

The simplicity of this method of enhancing the radio voice by putting pictures before the eyes of the listeners at the same time can be seen by the following excerpt from the advance program sent to schools:—

April 1—9:55 to 10:15 A. M.
Junior High Schools

"Ships on Seven Seas". Slides: 26, New York; 52, Hoboken; 514, Canton; 511, Ceylon; 154, "Soo" Canal; 253, Panama Canal; 254, Gun boat; 559, Suez; 342, ships and ice; 344, icebound; 415, whale ship; 295, loading produce; 430, little ships; 525, Japanese ships; 100, battleships."

Suggested reading: "Historic Ships", Holland. "Boys with the U. S. Navy", Wheeler.

The suggested reading is largely for the teachers' benefit to supplement data already given in the advance schedule. The teacher finds it useful in the preparation of classes for the broadcasts.

New Film Bill Introduced

Representative Hudson, of Michigan, has introduced a film bill into Congress for the regulation of the motion picture industry much along the lines of the Interstate Commerce Commission for the control of railroads. He suggests a commission of nine members, four of them women, appointed by the President for a term of six years.

No film could be distributed until this commission had granted it a license. Among the number of prohibitions included in the censorship provisions is "any motion picture which is harmful to the public or to any part thereof in any respect which distorts representations of the national life, literature, manners and customs of this country or disturbs public peace or impairs friendly relations with foreign nations."

Authority is specified for the committee to require open competition for the rental of films and to prohibit "block booking." Finally, all regulatory authority now exercised by the Federal Trade Commission over the moving picture industry would be transferred to the proposed Motion Picture Commission.

Catalog Available of Will Day Collection

In a previous issue of THE EDUCATIONAL SCREEN (December 1929) appeared a news item on the sale of the Will Day Historical Collection of Cinematograph and Moving Picture Equipment. We are pleased to announce that this sale will not close until noon of May 3rd. A handsomely illustrated catalog of the collection, containing a detailed description of each item, may be obtained from Messrs. Harris and Gillow, 80-82 Wardour Street, London W. 1, England, for five shillings.

Course in Talkies in New York City Schools

Among the new subjects on the program of instruction announced by New York City Board of Education for the new school term is a science course for seventh and eighth grade pupils on the making of talking pictures.

Round Table on Films at Rollins College

When Rollins College, Winter Park, Florida, held its second annual Institute of Statesmanship during the week of January 6th, considerable attention was devoted to the motion picture because of the role it plays in public opinion. Among those who participated in the round table discussion were Huston Thompson, formerly with the Federal Trade Commission, as chairman, Carl Milliken of the Hays organization, Abram F. Myers, head of Allied States Association, and Dr. William Sheafe Chase, of the International Reform Federation.

Mexico to Use Talkies in Education

Education is one of the principal planks in Mexico's revolutionary program and Mr. Padilla, Mexican Secretary of Education, stated at a recent luncheon in New York City, attended by leaders of the motion picture industry, that Mexico had decided to adopt audible films as an aid in building up its civilization. Mr. Padilla has made a lecture film to be used in the schools throughout Mexico in an effort to further the purpose of education. His aim is not only to disseminate learning among the children, but among adults as well, thus preparing the peasant class to share in the task of administering the country's affairs.

AMONG THE MAGAZINES AND BOOKS

CONDUCTED BY MARION F. LANPHIER

The Illinois Teacher (January) "Better Films" by Stella Levy, State Chairman of the Illinois Congress of Parents and Teachers, reviews the need for an educational program for parents and teachers in order to protect the child against the unwholesome and undesirable film which gives a distorted and perverted aspect of life, and provide educational as well as entertaining pictures.

The local committee in every case should have certain aims in mind.

1. It should consist of a chairman and three members. In her report at each meeting the chairman should include the list of recommended films published in the current month's issue of the Child Welfare Magazine, and the reminder that "No school child at the movies on nights preceding school days" is a protection against over-stimulation of the child. One Better Films program should be provided during the year.

2. Intelligent, discriminating parents can be instrumental in bringing the producers to a realization that only high grade pictures are desired as public entertainment. To assist parents in making a careful and wise selection of films the child sees, the Better Films committee should post in school buildings, churches, and community centers the list of films recommended by the national Motion Picture committee and keep the list up to date.

3. Recommend to parents the Motion Picture booklet published by the National Motion Picture committee and take orders at your meeting.

4. Give the Motion Picture Censor Board in your city your moral support.

5. Co-operate with the exhibitor in your district, get his viewpoint, and give him yours.

6. The Juvenile Protective, Recreational, Legislative, and Better Films activities are closely linked. Whenever an opportunity occurs these committees should co-operate to develop a well-rounded program.

7. Know your theaters. Are they safe as to exits, properly ventilated, well lighted, and clean?

The article closes with the following appeal.

8. The national Motion Picture committee is conducting a survey to get an organized expression on motion pictures offered to the public as entertainment. This survey will be expressive of our opinion as to what kind of pictures we do and do not want for ourselves and children. Your co-operation is urged.

The Nation (January 15) Again we have the statement that the "talkies" will never pass.

The immediate and overwhelming popularity of the "talkies" gives evidence of the fact that they have come to stay. Not only have the most important producers ceased to make anything else, but the "wiring" of even the village nickelodeons has gone on so rapidly that the silent movie house is already almost a thing of the past. The wave of public protest predicted by certain critics never showed the slightest sign of materializing, and audiences, instead of troubling themselves about the alleged threat to an independent art form, accepted dialogue as an obvious addition to their favorite entertainment.

Further the editor feels that the "talkies" are creditable technically. Yet, despite these happy aspects of the situation, the writer feels that, like the silent film, the sound picture is doomed to mediocrity.

There is not, at present, the slightest reason for supposing that the talkie is destined to rise above the artistic level of its silent progenitor. The best dialogue pictures yet seen are not in any significant respect superior to the best of the old-style films, and the pity of it is that, whatever the theoretical possibilities of the new device may be, they do not seem any more likely to be realized than those possibilities which enthusiasts have been, for ten years past, vainly discussing in connection with the traditional cinema. The word "movie" remains synonymous with all that is cheap and vulgar, not because cheapness and vulgarity are obviously inherent in the medium, but because the moving picture has developed under certain definite limiting conditions; and the prospects are that the talkie, developing under the same conditions, will continue as it has begun—that it will be merely a movie made more ghastly because it has learned to say in words the nonsense which it formerly could only imply in pantomime.

Surely *The Nation* has told the truth, the dismal truth. It is a futile business discussing the merits of the medium that, like its predecessor, will never be allowed to demonstrate its merits unless a sudden and drastic rescue is affected somehow by someone.

Church Management (January) An article stating that something is about to happen in the field of religious pictures arrests our attention, for that field has made but meager use of the cinema. The church, states the editor, has invested in machines and reels, but has not been able to compete with the theatre.

Attractions which have filled theaters seldom have been listed for non-theatrical presentation. This has forced the church to use exclusively films prepared for propaganda, educational and religious purposes.

In the effort to make pictures which are morally inoffensive the producers have usually made those which are also uninteresting. Pious pictures are something like pious books. Everybody recommends them to their children, but no one likes to read them.

After the first novelty of the situation wore off many ministers sought to find a way to use motion pictures in the educational and worship programs of the church. One way was to find suitable films for use in the church school.

A second method evolved was the synchronizing of the motion picture in the worship service.

The writer then promises relief in a new plan.

The Motion Picture and Distributors of America, under the direction of Will Hays, has started a movement which may be most vital in the entire use of pictures in the church. This organization recently selected a committee from the many walks of life to discuss the whole relationship of motion pictures and the church and to make a survey of present uses and suggest means for further improvement.

All this is a mighty fine program and a big order. If the religious forces could get together with the motion picture producers it might revolutionize the use of pictures in churches. But to our mind that is the real rub. Will churches and the motion picture producers get together?

Academy of Motion Picture Arts and Sciences (1929) This Annual Report states the purpose, the business and the achievement [illegible] of this organization. [illegible]'s membership list, its committees and executive board are made up of the distinguished names in all departments of the moving picture world. A most needed Academy —success to it.

BOOK REVIEWS

MOTION PICTURES IN HISTORY TEACHING, by Daniel C. Knowlton and J. Warren Tilton. Published for the Department of Education, Yale University, by Yale University Press, New Haven, Conn. 182 pages.

A notable work of research on the teaching of history with films, here recorded with satisfying fullness, makes this book an outstanding contribution to the literature of the visual field.

Ten of the famous *Chronicles of America Photoplays* were used as the basis of the experiment made at the Troup Junior High School of New Haven, under the direction of the authors of this volume and with full cooperation from other members of the Yale faculty, from the Yale University Press and from the Principal of the school and the six teachers actively participating in the work. Under conditions very nearly ideal, permitting thorough supervision and scientific control, the results obtained must be recognized as sound and conclusive evidence for the subject-area of the experiment.

The book is a scholarly and scientific presentation of all data needed by the reader in order to appraise the value of the results. It describes the films used, the plan of procedure, methods of control, measurement of enrichment, of interest, of retention—with full tables and analyses of same. Section XIV summarizes the interesting results and conclusions, which are overwhelmingly favorable to the films. An Appendix of 90 pages carries the complete text of the tests, voluntary readings, control material, etc., as used in the experiment. It is an extremely significant and interesting volume, which should be in the hands of every serious student of the visual field.

MOTION PICTURES IN THE CLASSROOM, by Ben D. Wood and Frank N. Freeman. Published by Houghton Mifflin Company. 392 pages.

This volume presents a comprehensive account of the most elaborate work of research yet made on the value of motion pictures in teaching. In the Introduction to the book the history of the experiment is traced from 1922 when the National Education Association appointed its first Committee on Visual Education. Conferences with the Industry were held, and George Eastman finally sponsored a program of investigation and research, covering the period from 1923 to 1929, which has culminated in the interesting and important findings here presented in full detail.

The first chapter describes the experiment, its purpose and method. The work was based on 20 specially made films, 10 in Geography and 10 in General Science, these to be used in strict accordance with a definitely laid out program of procedure. The subjects of the 20 films were—(in Geography) New England Fisheries, Wisconsin Dairies, Wheat, Wheat to Bread, Cattle, Corn, Cotton Growing, Irrigation, Bituminous Coal, Iron Ore to Pig Iron; (In General Science) Hot Air Heating, Atmospheric Pressure, Compressed Air, Water Cycle, Water Supply, Purifying Water, Limestone and Marble, Sand and Clay, Reforestation, Planting and Care of Trees.

The experiment involved nearly 11,000 children in more than 300 classes (grades 4 to 9), taught by nearly 200 teachers of the public school systems of 12 cities, namely, Atlanta, Chicago, Denver, Detroit, Kansas City, Lincoln, Newton, New York, Oakland, Rochester, San Diego and Winston-Salem. In every city the pupils were divided accurately into the customary two groups—the experimental groups using the film, the control groups taught the same subject matter without use of film. Though conducted on such a vast scale, the whole experiment was expertly controlled, the collection of data was complete, and the mass of material derived has been collated, analyzed and presented in skillful condensation and summary within the 400 pages of this book.

This first chapter of the book contains a full reprint of one of the guides supplied to experimental teachers on one of the Geography topics, and on one of the General Science topics. The character of the films is discussed, likewise the 16 mm. size and the apparatus used in projection. The time-schedule

of classes and a 23-point Summary conclude the chapter.

Chapters II and IV inclusive discuss the comprehensive tests used, both initial and final, their character and purpose, method of scoring and tabulating, analytical tables of results, and the character of the experimental and control groups as determined by the tests.

The Topical Tests used are treated in Chapters V to VII inclusive. Their purpose and method of scoring are explained, with a sample test reprinted in full. Then follow a discussion of the results secured, interpretation of the evidence, and finally a detailed comparison of results obtained from the comprehensive and topical tests, showing their marked agreement. Elaborate tables of results are given with the discussion.

An intensely interesting part is Chapter VIII which, together with the 53 pages of Appendix 6 at the end of the book, gives full details on the Questionnaire answered by the Experimental Group teachers regarding the value and effectiveness of the picture method. The answers are overwhelmingly favorable to the films, in some cases practically unanimous.

Chapter XI gives a masterful summary of results of the whole investigation, and is followed by some 160 pages of Appendices which contain the full text of all study guides used in both Geography and General Science, verbatim comments by teachers, etc. etc. An Index is provided at the end.

"Motion Pictures in the Classroom" is an outstanding book, in some respects the most significant contribution yet made to the literature of visual education. To many teachers, who have been using pictures and films for years past, it will appear merely as a hardly needed confirmation of what was already perfectly well known and thoroughly proved by their own experience. Some of them freely say so in no uncertain terms. But, for the great majority of the teaching profession—not yet really awake to the potentialities of pictures in the educational process — this book should be a tremendous stimulus to bigger things. The book should prove a major influence in focusing the attention of the educational field as a whole upon certain missed opportunities in the traditional pedagogy of the past.

SOUND MOTION PICTURES, by Harold B. Franklin. Doubleday & Co., Garden City, N. Y. 1929.

"From the laboratory to their presentation," is the scope of the subject Mr. Franklin has set for himself, and the book presents what is probably the premier attempt at a text on the talkies—the first at least, to address itself to the general reader who wishes to inform himself on the subject, as well as the technician who is intimately concerned with all the new wheels which necessarily go around within the industry as a result of this new technique, both in the studio and the projection booth. Being the president of the Fox West Coast Theatres, Mr. Franklin naturally enough looks at the subject also from the exhibitor's standpoint, and surveys the changes which the sound motion picture has brought to presentation, to the short subject, the music in the theatre and to theatre advertising.

The chapters on standard sound devices and the principles of studio technique will be a welcome source of information to the reader who has perhaps tried to find his way through the maze of technical treatises on the subject. Mr. Franklin also indulges, and not too weightily, on the outlook for the future, the foreign market, television and the commercial possibilities of sound.

The Function of the Picture in Science Instruction

(*Concluded from page 75*)

further environmental experience. In the first and third steps, the picture occupies a position of unique and fundamental importance, serving a purpose completely distinct from that of the experiment.

Aside from the experiment, there is the classroom demonstration, the intent of which is to show the application of scientific law to environmental processes. The observation in action of a real geyser, a still, a caisson, a dynamo cannot give the pupil as clear an understanding of how these things work as does the laboratory model, which makes the operations more visible or analyzes the total process into simpler, more understandable processes, but which may resemble the real thing in hardly any other respect than principles of operation. Again the film, and especially the animated cartoon, is capable in its duplicate capacity of assisting this essential method of teaching. But again must it be pointed out that the provision of a laboratory demonstration of a caisson without experiences with a real caisson falls short of the aim of science instruction to give the pupil an understanding of his physical environment. Just as the derivation of a law without experiences with its applications is valueless, so the understanding of a process is useless unless one has experienced and knows the process.

Thus the increased use of the picture in science instruction represents a true change in purposes and methods. It is more than an aid to the older methods; its achievements are different from theirs. Without it, the science course, while actually working with concrete, visually observable materials, is an abstract and, for the pupil, meaningless study.

THE THEATRICAL FIELD

CONDUCTED BY MARGUERITE ORNDORFF

Theatrical Film Reviews for March

[261] *LUMMOX*
(United Artists)

The beautiful work of Winifred Westover as the inarticulate peasant woman of Fannie Hurst's novel, is the outstanding feature of a picture excellent in many details. I suppose there is no need to relate the story here. It is episodic, and to some extent, jerky, but the character of Bertha holds it all together. Herbert Brenon has directed it with fine sincerity and unusual common sense. There are one or two really memorable bits of photography. The cast includes Dorothy Janis and Ben Lyon in more prominent parts with a great many well known and capable people appearing very briefly.

[262] *FOOTLIGHTS AND FOOLS*
(First National)

Colleen Moore plays over a wide range in the character of a New York actress who pretends to be French and becomes a success on Broadway. There are the usual wealthy man-about-town, and the good-for-nothing sweetheart, between whom the girl has to choose. Stage scenes, as usual in color, with songs and dancing are a part of the plot. Frederick March and Raymond Hackett offer good support. Not especially outstanding.

(See Film Estimates for January)

[263] *DYNAMITE*
(Metro-Goldwyn-Mayer)

The tale of a wealthy, willful young woman who has to have a husband in order to win her inheritance, and not being able to get the man of her choice at the moment because of his marital entanglements, marries a convict under a death sentence. The condemned man is unexpectedly reprieved, and from then on the melodrama is thick with the conflict between the society butterfly and the laboring man she has married. It is full of typical DeMille contrasts and exaggerations, ending with a soul-shattering cave-in of one of the lower levels of a coal mine. This alone is worth the price of admission if you care for cataclysms. Charles Bickford, Conrad Nagel, and Kay Johnson are the principals.

(See Film Estimates for September)

[264] *POINTED HEELS*
(Paramount)

I rather enjoyed this for a change. It has the always satisfying William Powell as a theatrical producer, making refined advances to Fay Wray as a show girl. She spurns him and marries an impractical young musician whom she has to support while he composes a symphony. This brings the producer back into the picture, and he almost succeeds in winning her—but only almost. Upon his final rebuff, he fades gracefully from the scene. Helen Kane and Richard Gallagher furnish some lively comedy as a stage team, and Phillips Holmes is the young husband.

(See Film Estimates for January)

[265] *SALLY*
(First National)

The charming Marilyn Miller and her exquisite dancing make this worth your while. The story, inconsequential as musical comedy stories are, merely serves to string together the songs and dances. Alexander Gray as the hero has a pleasant, not unusual voice. Joe E. Brown in the part created on the stage by Leon Errol has something of a job to follow in his footsteps, but is on the whole amusing in his own way. The color work is good.

[266] *THE SACRED FLAME*
(Warner Brothers)

Somerset Maugham's story of an aviator, crippled by an accident a few hours after his wedding, the love affair of his wife and his brother, and the tremendous sacrifice of his mother, who sees the triangle, and removes the invalid son from the situation at the crucial moment by giving him an overdose of sleeping tablets. The aviator is capably played by Conrad Nagel, as are the parts of the wife and brother by Lila Lee and Walter Byron, but the finest work is done by Pauline Frederick as the mother, with second honors, perhaps, to Dale Fuller as the nurse. This is heavy fare, but satisfactory of its kind.

(See Film Estimates for February)

[267] *LILIES OF THE FIELD*
(First National)

Corinne Griffith plays a wronged wife who consoles herself with a gilded youth whose philosophy of life doesn't include marriage. Fairly dull. Ralph Forbes and John Loder furnish the masculine interest.

(See Film Estimates in this issue)

[268] *CONDEMNED*
(United Artists)

One hardly knows whether to classify this as comedy or tragedy. The two central figures are a French convict sentenced to the

THE FILM ESTIMATES

Being the Combined Judgments of a National Committee on Current Theatrical Films

(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)

Titles of Films (Actors) (Producers)	For Intelligent Adults	For Youth (15 to 20)	For Children (under 15)
Anna Christie (Greta Garbo) (M-G-M) O'Neill's famous play finely pictured with fine cast, Garbo and Dressler doing notable work. The rehabilitation of a prostitute makes a sordid theme but dramatic and character values are very high. Worthwhile for adults.	Very Interesting	Unwholesome	No
Battle of Paris, The (Gertrude Lawrence) (Para.) Only merit is charming work of heroine in a rather unwholesome story of winning back her lover from another girl of Paris' underworld in war time. Much hokum.	Fair	Unsuitable	No
Behind the Make-Up (Hal Skelly) (Paramount) Rather complicated story of backstage life, well acted but rather depressing and futile. Its good points are rather outweighed by its shortcomings.	Fairly good	Unsuitable	No
Broadway Hoofer, The (Marie Saxon) (Columbia) Heroine is a Broadway star vacationing in country. She gets drawn into playing incognito with a little road show. Love affair with the manager in the story.	Hardly	Passable	Hardly
Burning Up (Mary Brian-Richard Arlen) (Para.) Lively little comedy in which love makes a crooked auto racer turn honest. It is a thrilling struggle and he wins.	Amusing	Excellent	Good though exciting
Cameo Kirby (J. Harold Murray) (Fox) Another romantic story of the South in 1850, with Mardi Gras, gamblers and river boats—pleasing color, costumes, photography and singing, but not a great production.	Good of its kind	Rather mature	No
Case of Sergt. Grischa, The (Chester Morris) (RKO) Grim and tragic picture of world war time in Russia—showing the long struggle of a prisoner (Chester Morris is miscast in other than a thug role) for his freedom. Quite anti-war in effect, and anti-German in spots. Pretensious picture, carefully done, but not great.	Fair	Unsuitable	No
Chasing Rainbows (Bessie Love-Charles King) (M-G-M) Backstage story of a loyal heroine sticking to a hero who is an impossible ass. Very funny, but rather false, cheap, and vulgar in spots.	Hardly	Better no	No
Dames Ahoy (Glenn Tryon) (Universal) Cheap, suggestive, and more or less vulgar throughout. Not worth reviewing, much less seeing.	Worthless	Unwholesome	No
Dangerous Paradise (Nancy Carroll) (Para.) The old sex stuff of the white American girl and South Sea lust—with murder, depravity and the rest. Spotless heroine is supposed to redeem the trashy picture.	No	Unwholesome	No
Devil May Care (Ramon Novarro) (M-G-M) Romantic, pleasantly sentimental, semi-historical play—the hero, loyal to Napoleon, falling in love with a Royalist girl. The complications are interesting, musical interpolations good, and the whole is quite delightful entertainment. It is based on the French classic, "La Bataille des Dames."	Entertaining	Excellent	Good though a bit beyond them
Embarrassing Moments (Reginald Denny) (Universal) Denny's notably fine voice and presence is chief merit in farce-comedy that starts with an original little story but lapses into mere slapstick. Inane but probably harmless.	Hardly	Hardly	No
Grand Parade, The (Helen Twelvetrees-Fred Scott) (Pathe) Another backstage story, with hero-singer of a minstrel troop in the '90's brought to the gutter by booze and a blonde queen of burlesque—but the loyal little heroine saves him with the help of baby clothes. Only merit in film is fine work of Helen Twelvetrees as heroine. Otherwise lacking in good voices, good singing and good taste.	Hardly	Better not	No
Let's Go Places (Joseph Wagstaff) (Fox) Amusing farce-comedy of the manager who gets his star singer into the movies—but accidentally under the name of a really great singer. Lively action, kept free from the cheap or the risque—and with one notable stage-chorus scene not too long to be good.	Amusing	Very Good	Amusing
Lilies of the Field (Corinne Griffith) (First Nat'l.) Preposterous attempt at combining mother-love, stage-life, whoopee and prostitution. False, incredible, cheap and not helped by Corinne Griffith's poor voice and ordinary acting. (See Review No. 267.)	Worthless	No	No
Men Are Like That (Hal Skelly) (Para.) Another super-egotistical hero a bit more exaggerated and tiresome than usual—in a story that is farcical and silly at times. Rather inane but harmless.	Hardly	Fairly amusing	Of little interest
New York Nights (Norma Talmadge) (U. A.) Cheapness and vulgarity in fine clothes and jewels—elaborate jazz scenes—oceans of booze—and the villain is the best thing in the film. Heroine supposed to be of fine quality, and to love a hero who is an impossible cad and liar. Values hopelessly jumbled and distorted. Thoroughly unwholesome for youth, and still worse for export!! (See Review No. 273.)	See it and think	Pernicious	No
Night Ride, The (Joseph Schildkraut) (Universal) Another hero-reporter beats another super-gunman in a hashy concoction of thrills and romance. Brutality, unreality, and painful overacting by Schildkraut—with cheap and offensive lines in the dialog.	No	No	No

Titles of Films (Actors) (Producers)	For Intelligent Adults	For Youth (15 to 20)	For Children (under 15)
No, No, Nanette (Bernice Claire) (First Nat'l.) The stage success fairly well done in color, many laughs and little else. The central idea of the bald-headed Bible publisher having "affairs" with other women than his wife is made utterly farcical. Obvious fun and probably harmless. (See Review No. 272.)	Fair of its kind	Amusing	Perhaps
Not So Dumb (Marion Davies) (M-G-M) The screen version has largely turned into farce the famous comedy of "Dulcy," so finely played by Lynn Fontanne. As the well-intentioned, bromidic - minded fiancee who complicates every situation she tries to help, but blunders through to success at the end, Marion Davies is merely funny, not subtly interesting.	Fairly amusing	Very Good	Good though a bit beyond them
Officer O'Brien (William Boyd) (Pathe) Highly improbable stuff, of the heroic cop whose father is a jailbird and incurable crook—and hence embarrassing to his son. Many guns and an exceedingly hard villain make plenty of artificial thrill.	Hardly	Doubtful	No
Party Girl (Douglas Fairbanks, Jr.) (Tiffany) Another flaming-youth story, portraying the hired jazz-girl as the key to big sales in American business circles. Impertinent, unwholesome, and an outrageous example of a film that should never be exported, but will be.	Trashy	By no means	No
Peacock Alley (Mae Murray) (Tiffany) Possesses only the cheap appeal of an embarrassing situation, in which a rural bridegroom (crudely played by Robards) is threatened with ejection from a New York hotel on his wedding night because of his bride's well-known and lurid past.	Cheap	Unsuitable	No
Phantom of the Opera (Lon Chaney) (Universal) Painful attempt at reviving some ancient photography—hardly worth it to begin with—by patching it up with grotesque sound and some very poor speaking voices. Lon Chaney does not speak at all and there are many misfits in the synchronization. A crudity.	Hardly	Poor	No
Royal Box, The (Alexander Moissi) (Warner) First talking picture made in America with all-German dialog. Made from the costume play on the life of the English actor, Edmund Kean, it is a tragi-comedy of great appeal. Moissi does wonderful work in title role.	Notable	Probably beyond them	Beyond them
Second Choice (Dolores Costello) (Warner) A cheap comedy, in execrable taste, which makes a hero of a roughneck crook with pomade hair, burlesques heroine's father and mother, and gives Dolores Costello a ridiculous role.	Worthless	No	No
Second Wife (Conrad Nagel) (RKO) Realistic, unpretensious and pleasing little domestic drama of the hard position of the second wife when there was a child by the first, even though the husband is fine, genuine, and well-intentioned. Light but intelligent entertainment.	Rather interesting	Of interes to some	Of little interest
She Couldn't Say No (Winnie Lightner) (Warner) Another backstage-racketeer-night-club concoction, with Winnie Lightner's laughable sayings as the chief relief. She is a humble nightclub entertainer, raised to stardom by her crook-backer, who then turns his affections to a rich society girl. Guns bring "happy ending."	Hardly	Better not	No
Son of the Gods (Barthelmess) (First Nat'l.) Barthelmess as a cultured son of high-class Chinaman is humiliated when he aspires to marry into Occidental society. But he isn't Chinese after all!!!—hence happy ending. Rather interesting for bits of Chinese home life and ideas, carefully done and well acted.	Rather good	Passable.	Beyond them
Street of Chance, The (William Powell) (Para.) A thrilling picture of gambling and gun play, obviously based on the Rosenthal murder. Powell does notable acting as the gambler. Film exploits the thrills and dangers of the gambler's life, and portrays so much sterling quality in the gambling hero that he commands immense sympathy and appeal. His death is a blow to the audience, not poetic justice.	Fine of its kind	Doubtful	No
Tiger Rose (Lupe Velez) (Warner) Romantic melodrama, containing some fine scenery of the northwest and the Redwoods, much hokum and artificial thrill and some poor acting by Monte Blue and others. Serves no visible purpose.	Mediocre	Mediocre	Hardly
Vagabond King, The (Dennis King) (Para.) A masterpiece. The finest romantic comedy made since the talkies came. Based on the famous historical romance of the 15th century in France, "If I Were King," the picture is gorgeous in color, beautiful in sets and costumes, dynamic in action. Excellent singing enhances and does not interfere with the dramatic story. Notable acting by Dennis King as Villon and O. P. Heggie as Louis XI, with fine supporting cast.	Excellent	Excellent	Good
Woman Racket, The (Blanche Sweet) (M-G-M) Just another night club-gangster melodrama—first called "The Come-On," then "Night Hostess," finally as above, but it doesn't matter at all.	Mediocre	No	No

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NOTE— The Film Estimates omit the notations, "talking" and "silent," unless required in particular cases. Practically all films are available in both versions and the "sound" version will generally be shown wherever the theatre equipment permits.

penal colony at Devil's Island, and the intimidated wife of the brutal prison governor. Certainly the background is tragic enough, but Ronald Colman plays Michel the convict in the same vein as *Bulldog Drummond,* and he doesn't fit. Ann Harding is pathetic as the wife, and Dudley Digges excellent as the governor. Louis Wolheim as another convict adds his usual colorful performance. The picture has no theme song, if that is any attraction.

(See Film Estimates for January)

[269] ***THE LAUGHING LADY***
(Paramount)

With Ruth Chatterton and Clive Brook, no picture could go far wrong, and this story of the divorcee who seeks revenge for her ruined reputation by throwing herself at the lawyer who ruined it, profits exceedingly from their presence. Sophisticated and well-produced.

(See Film Estimates for February)

[270] ***THEIR OWN DESIRE***
(Metro-Goldwyn-Mayer)

Norma Shearer is not entirely at her best as the flippant daughter of a novelist who has outgrown his wife and discards her. The girl falls in love with a boy who turns out to be the son of the other woman. They do a good deal of agonizing over the situation, egged on by the emotional abandoned wife, but finally decide to consult their own desires instead of those of their families. The dialog, supposedly that of cultivated people, is largely of the "And how!" school. Lewis Stone and Belle Bennett are adequate as the incompatible parents, and Robert Montgomery is the boy.

(See Film Estimates for January)

[271] ***THE SHOW OF SHOWS***
(Warner Brothers)

One of the most lavish of the current deluge of sound and color revues, showing off all the stars of the Warner group, including Mr. Barrymore in a theatrical presentation of Richard's soliloquy from the fifth act of *Henry VI.* The picture's greatest attractions are its color, movement, and rhythm, of which the black and white ballet, the military number, the Chinese fantasy, and the Carpentier number are the best examples. There is a new idea, too, in the dance arrangements by which the figures move up and down vertically against a dark curtain most effectively. The chief drawback is the way in which the producers, with all the tricks of the camera at their command, cling to the most antiquated of stage devices for changes of scene.

(See Film Estimates for February)

[272] ***NO, NO, NANETTE***
(First National)

Alexander Gray, Bernice Claire, Lilyan Tashman, Bert Roach, Louise Fazenda, Lucien Littlefield, and Zasu Pitts cavort through the music and dialog of this familiar comedy with fair success. The color sequences are badly blurred, but that might have been the fault of the particular print I happened to see. You will probably like it, although it differs little in general make-up from the rest of the converted stage shows we are seeing just now.

(See Film Estimates in this issue)

[273] ***NEW YORK NIGHTS***
(United Artists)

Norma Talmadge as the actress-wife of a mediocre song writer, does not shine particularly. The role, for one thing, is trite, and Miss Talmadge's conception of it, for another, is not original. Gilbert Roland is only fair as the husband. Roscoe Karns as another song plugger, and Lilyan Tashman as a plain-speaking chorus-girl friend were much more to my liking. John Wray as a racketeer is the most interesting of all.

(See Film Estimates in this issue)

[274] ***HELL'S HEROES***
(Universal)

Realism with a bang! Made from Peter B. Kyne's story, *The Three Godfathers.* Three desert rats rob a bank, kill the cashier, and make for the desert. They come upon a new-born child and its dying mother, and agree to see that the baby is taken to its father in the town from which they have just fled. In order that the child may have their meager supply of milk and water, one of the men shoots himself, and another wanders away into the desert. The third, dying of thirst, drinks from a poisoned well in the hope that the water will give him strength enough to reach the town before the poison does its work. Well done but not pleasant. Charles Bickford, Fred Kohler, and Raymond Hatton are very, very good.

(See Film Estimates for February)

[275] ***THE BISHOP MURDER CASE***
(Metro-Goldwyn-Mayer)

This is that mystery story of Van Dine's in which the murders all correspond in a grimly fantastic way to nursery rhymes, beginning with *Cock Robin* and ending with *Little Miss Muffet.* It is nicely done, with Basil Rathbone performing excellently as the famous Philo Vance. Alec Francis, George Marion, Roland Young, and Leila Hyams are only a few of the fine cast.

(See Film Estimates for February)

Visual Instruction Section at the Ohio Educational Conference

Due to the increasing importance of moving pictures in education, an additional section, Visual Education, has been added to the Tenth Annual Ohio Educational Conference to be held under the auspices of the Ohio State University at Columbus, Ohio, April 3, 4, and 5, 1930. Mr. B. A. Aughinbaugh, director of visual education, State Department of Education, is to be chairman. Speakers for the section will be announced later. (*Educational Research Bulletin.*)

SCHOOL DEPARTMENT

Conducted by DR. F. DEAN MCCLUSKY
Director, Scarborough School, Scarborough-on-Hudson, N. Y.

A Survey of Visual Instruction

(Editorial note)

IN THE spring of 1923 a survey of the administration of visual instruction in the United States was made under the direction of the Editor of the School Department. He was assisted by Miss A. Loretta Clark of Los Angeles and Mr. Charles Roach, then of Ames, Iowa, now of Los Angeles. The survey was made at the request of the National Education Association Committee on Visual Instruction.

The results of the survey were reported in type-written form to the National Education Association Committee of which Dr. C. H. Judd of the University of Chicago was chairman. Last February the National Academy of Visual Instruction became interested in the publication of the report inasmuch as it contained information that was valuable to directors of departments and bureaus of visual instruction. However, as nearly six years had elapsed since the report was written it was thought desirable to bring the fundamental statistics up to date. Accordingly, a questionnaire was prepared and sent to city and state bureaus of visual instruction throughout the country by Mr. McClusky.

The following paragraphs, which have been gleaned from the returned questionnaire, indicate some of the tendencies in visual instruction in various parts of the country since 1923. In each instance, the location of the "bureau" and the name and title of the individual in charge is given.

Visual Instruction in City School Systems

Alabama

Birmingham City Schools—It has been the policy of the schools to buy their own apparatus and the Board of Education furnishes the film. The superintendent has given me a new office centrally located in the down-town district.—Earl E. Sechriest, Chairman Visual Instruction.

California

Los Angeles City Schools—Amount of all equipment has increased considerably since 1923.

Visual Education is the result of the felt need for objective rather than subjective pedagogy—Charles Roach, Director Division Visual Education.

Oakland City Schools—Our work along visual lines until 1928 was carried on almost entirely by a committee on visual education composed of principals and supervisors. The department of Visual Education for the Oakland Schools was organized in 1928 with a director in charge.

The objectives of visual education are to emphasize the classroom aspect of the work and the use of visual materials simply as another agency to assist the teacher in helping youngsters develop.—Roy T. Granger, Supervisor Visual Education Department.

Colorado

Pueblo City Schools—Our department was not organized until September 1929. All materials are requisitioned by classes for dates which will suit the course of study.—Max D. Morton, Director of Visual Instruction.

Connecticut

Bridgeport City Schools—In 1924 we used theatres for this work. In 1926 the state law was amended so as to make possible the use of acetate film, and we were presented with the Chron-

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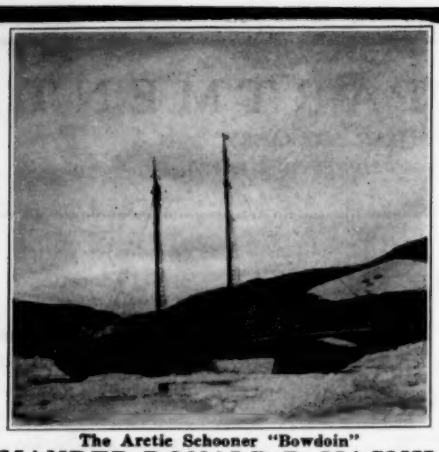

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icles of America. Since then we have been slowly getting away from the view that motion pictures are to be used for entertainment.—Edwin W. Johnson, Supervisor Visual Instruction.

Georgia

Atlanta City Schools—Motion pictures are no longer regarded here as mere "extras", and are usually shown now to the single class scheduling them. Visual Instruction has come to a place of recognition as an integral part of classroom procedure and not as mere addendum. It was usually referred to as a "frill" in 1923, but not generally considered so now.

Objectives in visual instruction are inseparably interwoven if not identical with the objectives of education in general and of the subject taught in particular. Hence to assign a separate set of objectives for visual instruction, as such, tends to set apart visual instruction as a distinct method of instruction or as an addendum to educational procedures, the very notion which we have been trying to dispel.—E. R. Enlow, Director Visual Instruction.

Illinois

Chicago City Schools—The trend of visual education in Chicago has been toward conservative lessons in film series; and the development of home-made slides.

Visual Instruction puts the spirit of life into the studies through which students learn to live most effectively and how to render most efficient service as good citizens.—Dudley G. Hays, Director Visual Instruction.

Moline City Schools—The department is very small but we have added one more part time employee to our staff.—Dolph Lain, Director Visual Education.

Indiana

Bloomington City Schools—A club of 7th and 8th grade boys was formed which met weekly, led by the Director, called the "See More" Club. Twenty nine boys were taught lantern and moving picture machine operation; slide and film repair; sorting and filing and caring for material and equipment; picture appreciation; film making; photography; etc. The Club had boy officers, committees and each boy made picture collections on a subject of his choice, which were donated to the Visual Education Department of the School. Some did mounting, sorting, filing, etc.

We have constructed a projection room in the dark basement room of the High School for classes to view films and slides; we have plug fixtures in nearly every school room; we have collected over 125 fine exhibits from advertising companies and continually add more.—Lorin Ashbaucher, Director Department of Visual Education.

East Chicago City Schools—The students in our high schools are trained to be operators by the director. In the elementary schools the teachers are trained by the director. The development of the department has been steady and rapid. We have developed the use of opaque projectors in several of our schools, especially in the primary grades. School journeys are undertaken rather systematically.—Katherine MacDougall, Director Visual Education.

Indianapolis City Schools—We found the circuit method very unsatisfactory as classes had to be interrupted to suit the time of the operator, going from building to building and on several occasions films failed to arrive, and after groups had been assembled in the auditorium they had to be dismissed.

We have developed in our own production department new and original series of charts on nature study, science, industries, art, music, civics, etc.—Roderic H. Rae, Director Visual Education department.

Michigan

Detroit City Schools—All visual material is selected and approved by a committee on each of the different subjects. In this way the visual materials correlate with the courses of study.

Visual Education is a curricula science . . . . an unusual agency for establishing reservoirs of retentive power . . . . The experiences resulting from the use of visual aids develop in the children, social attitudes, self-appraisal, and a better understanding and appreciation of the rights of their associates.—W. W. Whittinghill, Head Department of Visual Education.

Hamtramck City Schools—We organized a department in 1927. We bought equipment for every school in the system. We established a circulating system. We established a course of study in Visual Education in September 1929. The department moved to an office of its own in September 1929. We added a Children's museum in connection with Visual Instruction Department in September 1929.—Georgina Lannin, Supervisor of Visual Instruction.

Missouri

Kansas City Schools—Less material is shown, but more good is got from what is shown.—Rupert Peters, Director Division Visual Education.

New York

Buffalo City Schools—The trend of Visual Instruction in 1928-29 has been toward classroom use of film subjects and use of slide material in basic instruction. Also to the establishment of permanent department, equipment and personnel.—Alan H. Nicol, Supervisor of Visual Instruction.

New York City Schools—The main effort of the Bureau at present is to correlate visual material with the new course of study in geography, nature study, etc. We have been spreading visual instruction service to a greater number of schools, we have been adding the 16mm. film service.

The objectives of visual instruction are: accuracy of observation; self-reliant thinking; leading to intellectual honesty; broadening the child's horizon; increased vocabulary; increased use of correct English, oral and written; sometimes additional factual information; sometimes motivation to right conduct.—E. L. Crandall, Director Lectures and Visual Education.

Schenectady City Schools—Since the organization of the Department in 1927, we have placed special emphasis on the use of slides, with a growing emphasis on the use of stereographs and motion pictures. We are investing money in motion pictures very carefully, purchasing 16mm. films only.—A. E. Gilbert, Supervisor of Visual Instruction.

Ohio

Cleveland City Schools—The number of motion picture projectors, stereopticon lanterns, slides, exhibits, and all other equipment has been increased throughout the department.—W. M. Gregory, Director Educational Museum.

Dayton City Schools—Each school has its own equipment. We are just organizing a department which will provide motion picture service.—Carrie B. Hilkey, Chairfan Committee on Visual Instruction.

Toledo City Schools—We are expanding classroom projection of 16mm. films and building a slide library to supplement the Keystone sets.—M. R. Van Cleve, Director Visual Instruction.

Pennsylvania

Philadelphia City Schools—Our staff consisted in 1923 of two full time and one part time employee. In 1929 there were eleven full time employees.

We have made great strides in adding to all our equipment.—James G. Sigman, Director Division Visual Education.

Pittsburgh City Schools—Every elementary school and junior high school has been equipped with a permanent library in the school building of Eastman Teaching Films.

The objectives of Visual Instruction are to aid in developing appreciation of what progress has cost the human race.—John A. Hollinger, Director Department of Science, and Visualization.

Virginia

Richmond City Schools—We have no real department of Visual Education. Practically all of our schools are equipped with motion picture machines and stereopticons. The visual education committee of the principals conference makes suggestions and orders films.—H. J. Binford, Director of Visual Instruction.

Washington

Seattle City Schools—The trend of visual instruction in Seattle has been away from the film. There is now some interest in the 16mm. film but so far the organization of the slide library is fitted to fill the needs of the teachers. Slides are sent out in very small groups and every slide in the slide library has a heavy turnover each year.—Julia A. Shourek, Supervisor Visual Instruction.

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Audible Moving Pictures

Audible Moving Pictures is the title of the leading editorial by Dr. W. W. Charters in the Ohio State University, *Educational Research Bulletin* for Dec. 4, 1929. Dr. Charters who is one of our leading educators writes as follows on this topic:

Moving pictures have been added to the teaching materials of many progressive schools with excellent results. They are particularly useful in those fields where learning is assisted by demonstration and illustration. In art, physical education, nature study, industrial processes, and in many similar fields, they provide media of instruction which are not available in other form. They are substitutes for travel to distant places and time-consuming visits to industrial activities. They bring the realities of the world to the classroom.

One limitation, however, is significant, the average teacher frequently does not know enough about the content of the film to be a good interpreter and the subtitles, obviously, cannot be adapted to every classroom. Printed directions to teachers help to remove this obstacle, but, at best, the limitations are serious.

The radio is now entering the schoolroom. In Ohio, and in some other states, definite school programs are provided through legislative funds, and equipment is being installed in thousands of schoolrooms. This medium is so new that it has not yet passed beyond the stage of experimentation, and what its future status will be we do not at present know. Certainly it will provide the average school with better music than it could hope to secure for itself. It will bring children into personal touch with interesting personalities in a manner quite superior to the printed page. Other substantial uses will develop as the work continues.

The limitation of the radio lies in its inability to appeal to the eye. In many fields it must be a form of lecture, with the lecturer out of sight. This disadvantage is so serious that its future as a medium of instruction may easily lie chiefly in the field of music.

The audible moving picture is, however, the coming medium in these fields. When it is used, the moving picture will be explained by a master rather than a teacher, and the sound of the radio will be supplemented by sight. Its use will be invaluable in demonstrations of the laboratories, in athletics, in art, and in a score of other fields. The master demonstrator in the studio can show the action and explain its meaning. His superb artistry will then be available for exhibition in every corner of the nation. The moving picture and the radio thus seem to be merely the forerunners of the audible moving picture.

Slides on Basketball

An unusual series of 74 colored slides on basketball plays and fundamentals is now available from the Bureau of Visual Instruction of Indiana University. The set contains pictures illustrating correct form in the execution of fundamentals, and charts showing offensive plays. A special study manual which explains details of the pictures, accompanies the slides.

Are You A Leader?

Or do you simply follow the crowd in your teaching methods?

You Are Not A Leader

unless visual instruction is a part of your daily program.

The far-seeing teacher is using carefully selected illustrations to supplement the regular class work and is finding this system highly satisfactory.

Such illustrations can be obtained very reasonably in the Spencer Filmslide Library. A list of subjects available will be sent gratis.

She is also noticing increased interest on the part of all pupils, even those who were formerly inattentive. A general improvement in the work of all proves to her the value of this method of teaching.

If you are not one of the satisfied and happy teachers —write

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Coach Dean, who produced the film *King Basketball* a few years ago, is also responsible for this contribution to the increasing supply of visual aids distributed by the Bureau.

Recent Writings

"Picture Study in Geography," by Lora M. Dexheimer, appears in the *Journal of Geography* for November. The writer believes that these two considerations alone should give illustration a place of large importance in the study, namely—"good pictures, probably more than any other phase of our subject matter in geography, put man and his activities in the place of importance to the child; they also offer detail often omitted in textual material for lack of space." The remainder of the article explains the various methods of putting the pictures to profitable use and mentions several sources from which they may be obtained.

In the same issue of the *Journal of Geography*, Grace Markwell contributes a little writeup by the title "An Interest-Stimulating Device—The School-Made Movie." She describes how this interesting project in geography was worked out with the aid of an opaque projector. Scenarios written by the children were printed on small pieces of white paper which, together with pictures, were pasted on the film. The film consisted of long strips of cardboard which fit the projector, pasted together with gummed tape.

"Experimental Evaluation of Classroom Films"—by Dr. Frank N. Freeman, of the University of Chicago, in the December number of *School Executives Magazine*, presents a history of the classroom film and the recent developments in the field as backed by the Eastman Kodak Company. Two series of film, Geography and Science, were made and supplemented by teachers' guides. Space does not permit exposition of the experiment nor any real statement of the results. Suffice it to say that the visual aid proved to be an indispensable aid not to displace the teacher nor to take the place of oral discussion or reading, but to give the basic experience to be elaborated by means of language.

"Visual Aids in the Teaching of History-Geography in the Primary Grades"—by Miss Mildred E. Tyson, appearing in the *Baltimore Bulletin of Education* for December, reiterates the truth implied in Dr. Freeman's article.

"Through motion pictures, as in excursions, the child comes face to face with processes, activities, and realities. In the motion picture, it is true, he is denied a variety of sense contacts, but, on the other hand, he is exposed to a wider range of ideas and information."

"Commercial Geography in the Forest Park High School"—by Chester H. Katenkamp, in the same issue of the *Baltimore Bulletin*, discusses the use of visual aids in revising the courses.

"Pictures, lantern slides, moving pictures, and field trips are all considered valuable material upon which to build the understanding of any particular problem. These materials, though, are merely aids; they do not form the most important part of the work, for the desired understanding is one of reaction to a problem and not one of acquiring processes or facts."

"Many comments on the beauty of the picture--

and the suitability of the subject matter for use in our service."

says Eleanor R. Gregory, Assistant to the Pastor, Church of the Pilgrims, Brooklyn, New York

Special for Lent

"A WOMAN'S FAITH"

Blinded. Daniel Steele loses his sight, his faith. But his sweetheart's faith prevails and a cure is effected at the Shrine of Ste. Anne de Beaupre. With a great cast including Alma Rubens, Percy Marmont, Jean Hersholt.

"Mother of Mine" has received many other commendations from civic and religious bodies.

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Visual Education in Europe

(*Concluded from page 69*)

colors in art, the singular costumes and the lack of distinctive house furniture.

The Hungarians have visualized the thousandth anniversary of their occupation of the country by a great semi-circular colonnade 118 feet in height, crowned by the equestrian statue of the first chieftain and the thirteen Hungarian kings. At the center of this colonnade the Hungarian flag is at half-mast for the provinces lost in the World War.

The Hungarian Industrial Art Museum displays excellent examples of the Hungarian applied arts in textiles, glass, pottery, leather, wood carving, lace, enamel and brass. This institution also acts as an artist's exchange and from their catalogues one may select some excellent examples of Hungarian hand-craft.

Agricultural Museum of Budapest

The Agricultural Museum of Budapest is unique among all of the world's museums. The building is a Gothic castle built on the edge of a lake in one of Budapest's beautiful parks. All the sciences and practical arts which are related to agricultural pursuits are displayed here in their proper relationship. In animal husbandry, the problems of breeding and adaptation are illustrated by exhibits of horses, cattle, sheep and poultry. Many experimental institutions cooperate with the museum. Thus this Museum of Agriculture is not only a store house of exhibits but what is more vital it can give authoritative advice to farmers in nearly all fields. Its exhibits bring the practical minded in contact with the latest discoveries in all phases of agriculture. This institution is a factor in the advancement of agriculture in Hungary. Careful study has been made of exhibiting the Hungarian agricultural resources and it is done in an attractive manner.

The United States has a parallel in its Department of Agriculture and its experiment stations in each state. We issue bulletins but we do not have any great agricultural exhibit planned on a scientific basis. It is true that at Washington there are some displays in storage but there is as yet no appreciation of agricultural exhibitions. Agriculture would not need a subsidy if we made an art of it.

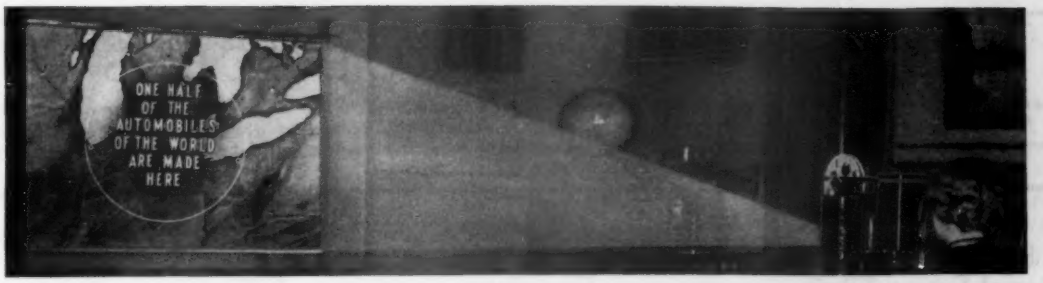
The School Museum of Berne, Switzerland

This institution has a large collection of school apparatus and visual materials. A large number of school children come to the building for lessons which must be difficult in the crowded quarters. The most important service consists in sending some 14,000 charts and 5,000 objects to the schools annually. These are sent by post to any school in Switzerland. All charts are rolled up and put in heavy card-board tubes and sent by mail. The use of the chart is very extensive in the Swiss schools and the charts are all made in Germany. In the United States charts of this type are made part of the school equipment and are not sent from school to school except in the large city systems.

Pestalozzianum, Zurich

This is a memorial to the famous educator, Pestalozzi. This institution has collected and preserved many authentic relics of this educational reformer. The manuscripts of his noted works, his furniture, paintings, and library are carefully preserved. The modern result of this memorial is a large library of educational books which are available to Swiss teachers. Those interested in objective teaching which Pestalozzi advocated, will find a large collection of charts, slides, objects and pictures for the use of any school in Switzerland. The slides are in sets and apparently are carefully chosen. The institution now has about 330 sets of slides and about 30,000 slides are circulated each year. The 4,000 charts are largely of the conventional German type and six are sent to a school on one order. The visual materials in this institution are chosen by a committee of teachers acting with the director, Herr Professor Stettbacher and Madame Ruhl who is assistant director. The Pestalozzianum has interesting paper cut models for children to use. A catalogue of these may be secured from the secretary.

The above is the fourth article in the series of seven. The fifth article will appear in the April issue.



'Half the world's cars come from this small area'

Unless they live within that area, your pupils cannot visit America's great automobile plants . . .

. . . but you can give them something even better than a trip to Detroit . . . With this new teaching device you can bring Detroit TO THEM.

ONLY a small percentage of American children live within reach of the great automobile plants of Michigan, Indiana and Ohio. Yet many millions of pupils can see how cars are made.

They can do *more*. Without leaving the classroom, they can not only visit an automobile plant, but also make rapid side trips to a Malaysian rubber plantation . . . an Akron tire factory . . . a plate glass plant . . . a refinery whence comes the gasoline that drives the car.

Usual Means Do Not Suffice

Words in books alone cannot bring this about. Recitations, maps, still pictures . . . all these help, but they do not cover ground rapidly enough for this rapid age, and they leave the topic in the abstract.

Pictured in Motion

Here is a new device that presents such topics as the automobile in a concrete way. At the proper time the teacher snaps a switch. The topic flashes to life on a silvered screen. It is pictured *in motion*, in such a way that no child can fail to grasp its significance.

Other Advantages

That, however, is only one advantage of Eastman Classroom Films. They cover their topics in *fifteen minutes*. In that time pupils see more than they could read in fifteen hours. Moreover, they remember what they see . . . for these films capitalize the liking all children have for movies, adapting it to the needs of classroom instruction.

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About one hundred Eastman Classroom Films are now available on topics of Geography, General Science, Health, Biology and Civics. All are planned for use by the teacher, in her own classroom.

If you have not received "A Descriptive List of Eastman Classroom Films," clip and mail the coupon below for your copy.

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AMONG THE PRODUCERS

Where the commercial firms—whose activities have an important bearing on progress in the visual field—are free to tell their story in their own words. The Educational Screen is glad to reprint here, within necersary space limitations, such material as seems to have most informational and news value to our readers

Pathe — Harvard Series of Educational Sound Films

Announcement has recently been made of Pathe's plan to produce, in cooperation with Harvard University, two series of educational motion pictures in which talk will be used wherever advisable.

Ones of this series will treat of "Regions of the United States" and the other "Commerce and Industry." In the first, the eight separate geographic regions will be the subject of sixteen reels of film, each of which may be used separately; in the second, the basic industries of the country will be discussed. Together the two will constitute a complete presentation of the physiography, resources and commerce of the nation, and their relation to the development of cities and the country as a whole.

Dr. Kirtley F. Mather, Dean of the Department of Geography at Harvard, will supervise the editing of the films. Distribution will be handled by the Educational Department of Pathe through its branch offices.

Cooperation in the production of educational motion pictures between Harvard University and Pathe is not a new step. For nearly three years the educational institution has been advising and directing the business organization in the production of pictures for educational use, during which time the series on Human and Physical Geography were made.

The Prince of Wales' African Expedition

The big game expedition to East Africa upon which the Prince of Wales has embarked carries a Bell & Howell standard motion picture camera with ultra speed attachment and two Eyemo turret head cameras. Also, His Royal Highness will undoubtedly carry his own personal Filmo camera which he has used so satisfactorily for some time.

The cameras, together with necessary lenses and accessories, were purchased direct from the Bell & Howell offices in Chicago. Negotiations were conducted by cable and were completed in three days after an initial inquiry was received from Commander Glen Kidston of the British Navy, sent from Chalet Valerette, Chesieres, Switzerland, where the Commander was evidently enjoying the winter sports.

In view of the fact that the Bell & Howell Company makes most of the professional cameras used in producing theatre movies and has had a wide experience in outfitting tropical and other expeditions, including that of the well-known explorer, Martin Johnson, Commander Kidston left the selection of the camera equipment to its technical service department.

A big game expedition is not restricted merely to the pleasures of sport, but has a tremendous scientific purpose as well, and the study of animals in their habitats, as well as the natives and their customs and conditions of living, plays an important part. Just as the wise hunter will always have his gun in readiness for instant use, the members of this expedition will have available at a second's notice the two hand-held Eyemo cameras, included in the equipment.

It will be interesting to note that the preservation of the expedition's films will be assured by specially designed and constructed containers which will eliminate the deteriorating effects of heat and moisture. The importance of this will be better understood when one considers the hardships and dangers that are frequently experienced to secure sometimes even just a few feet of extremely interesting or scientifically valuable film which would be hopelessly ruined if not properly protected.

Department of Agriculture Making Poultry Movies for World Congress

The Office of Motion Pictures of the U. S. Department of Agriculture is making a series of poultry films for the Fourth International Exposition of the World's Poultry Congress, to be held at the Crystal Palace, London, July 22 to 30.

Eight new films will make up the series. Two have been finished, though not yet released—*The Turkey Business* and *Breeding for More and Bigger Eggs.* The other films in production are *The Egg Marketing of the United States, The Poultry Marketing Industry of the United States,* and *Cooperative Marketing—Eggs and Poultry.* Films on which scenario work has been done, but on which production has not started, are *Brooding and Rearing Chicks, Eradication of Poultry Parasites,* and *Rearing Chicks in Confinement.*

Bibliography on the Use of Visual Aids in Education

By Joseph J. Weber, Ph. D.
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Editor's Note—This is the third installment of the Bibliography which is appearing serially in The Educational Screen from January to June, 1930. The Table of Contents for this complete Bibliography was printed with the first installment. (See page 29 of the January issue).

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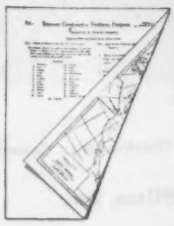

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